

MEDICARE PAYMENT ADVISORY COMMISSION

PUBLIC MEETING

Ronald Reagan Building  
International Trade Center  
Horizon Ballroom  
1300 13th Street, N.W.  
Washington, D.C.

Thursday, October 28, 2004  
9:32 a.m.

COMMISSIONERS PRESENT:

GLENN M. HACKBARTH, Chair  
ROBERT D. REISCHAUER, Ph.D., Vice Chair  
JOHN M. BERTKO  
SHEILA P. BURKE  
FRANCIS J. CROSSON, M.D.  
AUTRY O.V. "PETE" DeBUSK  
NANCY-ANN DePARLE  
DAVID F. DURENBERGER  
ARNOLD MILSTEIN, M.D.  
RALPH W. MULLER  
CAROL RAPHAEL  
WILLIAM J. SCANLON, Ph.D.  
DAVID A. SMITH  
RAY E. STOWERS, D.O.  
MARY K. WAKEFIELD, Ph.D.  
NICHOLAS J. WOLTER, M.D.

**AGENDA ITEM:**

**Mandated report on physician volume**

**-- Kevin Hayes, Dana Kelley**

DR. HAYES: Good afternoon. Dana and I are here to review preliminary results for a report on growth in the volume of physician services. The Congress asked for this report in the Medicare Modernization Act, and based on our discussion today we will proceed with drafting the complete report which will be ready for the November meeting. The report itself is due on December 8.

The specific requirements for this study are shown on this next slide. The MMA begins with a request that we address the extent to which growth in the volume of physician services results in care that improves the health and well-being of Medicare beneficiaries. It then goes on to ask us to address certain factors affecting volume growth.

First would be growth in three components that make up CMS's definition of physician services. They are the physician fee schedule, laboratory services, and Part B drugs. That's outpatient laboratory services. The next factor is changes in the demographics of the beneficiary population. Next is Medicare beneficiaries, their volume growth compared to other populations. Next we have coverage decisions and the effects of new technology. And finally, shifts in the site of care.

The law also asks us to evaluate whether CMS adequately accounts for the impact of changes in law and regulation on the sustainable growth rate. Recall that this SGR is part of the formula that's used to update payment for physician services and to control spending for those services.

Today Dana will present results on the first two factors affecting volume growth, the first two factors listed here, the spending in those three components and demographics characteristics of the beneficiary population. We will present results on the other three factors at the November meeting, and we will also explain what we have learned about CMS's estimates of spending due to law and regulations.

Before turning things over to Dana let me just make a few points that we made in the paper for the meeting about this matter of growth in volume and the health and well-being of beneficiaries. For reasons that you are all familiar with, we cannot definitively answer the question about whether volume growth results in care that improves health and well-being. Nonetheless, we are mindful of research which suggests that greater volume is often not associated with the improved outcomes.

The research that we are referring to here is that done by John Wennberg, Elliott Fisher and others at Dartmouth. For years they have studied volume growth, volume of physician services and other services furnished to Medicare beneficiaries, how that volume varies geographically and how it correlates with measures

of access to care and quality of care. Much of the variation that they have found centers around what they have termed as supply-sensitive services, discretionary services such as imaging, minor procedures, and tests.

One of the most important findings in their research is that volume is often not associated with improved outcomes. Indeed, in some cases outcomes are worse when volume is greater. The other thing that they found in working with the data, that it is possible, however, to reveal more efficient providers by using the Medicare data.

So what we want to do going forward here is to acknowledge this work in the report and to also address other research that's related to care for Medicare beneficiaries with chronic conditions. This is another stream of research which has identified, in a lot of cases, gaps between care delivered for these beneficiaries and the care that's recommended. Just to illustrate, this would include gaps in care for beneficiaries with diabetes and the extent to which they are receiving things like eye exams and monitoring of hemoglobin levels.

Other gaps in care that have been identified in the literature have to do with monitoring care and providing basic services for elderly beneficiaries. This would be things like immunizations, screening and mammography. So if we try to put these two streams of research together, in a lot of cases it seems as if beneficiaries are not getting quite the right mix of services, perhaps too much of some services and not enough of others.

This then brings us to the question of whether Medicare could become a more prudent purchaser to help try to achieve a better balance in the services a beneficiary is receiving. This is just a quick slide here which summarizes topics that the Commission is working on in this area, topics that you are very familiar with. You will be hearing about paying for performance in the hospital sector tomorrow. You know that in our workplan we have work on physician pay-for-performance as well. This morning you heard about provider profiling as another opportunity, perhaps, for more prudent purchasing on the part of the Medicare program.

So with that let me just turn things over to Dana. She will discuss those first two topics starting with changes in demographic characteristics of the beneficiary population and then moving onto the three components of spending.

MS. KELLEY: Demographic changes can affect growth in service volume and resulting expenditure growth. Such changes include growth in the number of beneficiaries, the aging of the population, and shifts in the geographic distribution of fee-for-service beneficiaries.

We looked first at growth in the number of beneficiaries. Between 1999 and 2003, the total Medicare population grew at a rate of about 1.2 percent per year. Changes in beneficiary enrollment in Medicare+Choice obviously affects the growth and composition of the fee-for-service population. Between 1999 and

2003 managed care enrollment among Medicare beneficiaries fell from 17 percent of all beneficiaries to 13 percent. As a result, fee-for-service enrollment grew about twice as fast as overall enrollment, increasing about 2.4 percent per year.

Next we looked at aging. The aging of the Medicare population is important, as you know, because older beneficiaries are more costly to the program. This chart shows that during the four-year period we looked at the proportion of beneficiaries age 75 to 84 and those 85 and older increased just slightly. You can barely see the change in the green and the bottom gold bars. Beneficiaries in the 65 to 74 age group, shown here in red, decreased as a percentage of total fee-for-service enrollment. Again, a very small change, from 43.3 percent to 42 percent. Beginning in 2011 we'll see this trend change as the baby-boomers start to become eligible for Medicare.

Our analysis also found an increase in the proportion of disabled beneficiaries. In addition, we looked at changes in the proportion of male and female beneficiaries and changes in the proportion of beneficiaries who died in the given years. We found a very slight increase in the proportion of male beneficiaries, which would tend to increase expenditures, and a small decrease in the proportion of fee-for-service beneficiaries who died, which would tend to decrease total expenditures in a given year.

Taken together, our analysis found that the net effect of changes in beneficiary age, sex, and rate of death is a decrease in spending on physician services, but the decrease is very small. The effect on spending per beneficiary during the time period was minus 0.1 percent per year. So these changes explain very little of volume and expenditure growth over the period that we looked at.

In addition to demographics, we also considered the geographic distribution of fee-for-service beneficiaries. This is important for two reasons. First, some areas of the country have been shown to have higher patterns of use than others. Secondly, Medicare's payment rates for physician services are adjusted to account for differences in input prices among geographic areas. So expenditure growth could be affected by changes in the distribution of fee-for-service beneficiaries across states, whether due to change in beneficiary address or changes in Medicare+Choice enrollment.

This chart shows the change in each state's percentage of total fee-for-service enrollment. The purple states saw an increase in their share of total fee-for-service enrollment. For example, in 1999 6.4 percent of all fee-for-service beneficiaries lived in Florida. In 2002, 7 percent of all fee-for-service beneficiaries resided there.

The four states experiencing the largest gains in fee-for-service share, Florida, California, Texas, and Arizona collectively represented about 20 percent of all fee-for-service beneficiaries in 1990 and about 22 percent of all fee-for-service beneficiaries in 2002. While no state experienced a drop in the

absolute number of fee-for-service beneficiaries, many states experienced a decline in their share of total enrollment. Those states are shown in shades of yellow. The biggest declines were seen in New York and Pennsylvania. New York had 6.7 percent of all fee-for-service beneficiaries in 1999 and only 6.4 percent in 2002.

Overall, states with gains in fee-for-service enrollment shares had higher average expenditures per beneficiary than states with losses in enrollment share. But spending per beneficiary was higher than average in the two states with the largest losses in enrollment shares, Pennsylvania and New York so the net effect of the geographic shifts was very small. Our analysis shows that because of these shifts, spending per beneficiary went up by about 0.2 percent per year from 1999 to 2002.

So our analysis suggests that the only recent demographic change that would be expected to have much influence on fee-for-service volume and expenditure growth is the rise in the number of fee-for-service beneficiaries. We controlled for that rise and looked more closely, as Congress asked us to, at trends in spending for services factored into the SGR formula.

This chart shows Medicare spending per fee-for-service beneficiary for physician services, outpatient lab services and Part B drugs. Keep in mind that the SGR formula excludes vaccines, immunosuppressive drugs, and drugs used with DME, so those drugs are not included in this analysis.

We found that Medicare expenditures for physician and lab services and Part B drugs combined have increased 8.4 percent per year since 1999, climbing from \$1,265 per fee-for-service beneficiary to \$1,749 in 2003. As you can see in red here, per fee-for-service beneficiary spending for Part B drugs has grown disproportionately over the period, averaging almost 23 percent per year. As a result, Part B drugs now account for almost 12 percent of the total expenditures considered by the SGR, up from about 7 percent in 1999.

Spending for Part B drugs has grown in part because of expansions in Medicare coverage policies. Congress has gradually increased the quantity, type, and duration of drugs covered. Growth in expenditures is also due to an overall increase in the volume of drugs being used, and an important factor is the substitution of newer and more expensive drugs for older therapies. Of the top 20 drugs covered by Medicare in 2001, seven received FDA approval in 1996 or later.

Medicare's payment methodology for Part B drugs has also played a critical role. Until recently, Medicare set its payment rate for covered drugs at 95 percent of the average wholesale price, which as you know, was not an average nor the price usually paid by providers, but instead was a manufacturer's suggested price. Actual prices paid by providers often reflected substantial discounts. As a result, Medicare's payments far exceeded provider acquisition costs.

Further, the payment method created incentives for a

manufacturer to pursue market share by raising its AWP, thereby increasing the spread between Medicare's payment and providers' acquisition costs, resulting in greater profits for providers who chose that product over competitors. Recent payment policy changes are designed to rein in spending for Part B drugs and change the perverse incentives and projections for 2004 spending reflect that.

Finally, an increasing number of drugs are produced through the use biotechnology, and use of these drugs has also driven up costs. These products are expensive when initially marketed and face limited competition over time because the FDA has no approval process for the generic versions of biologicals.

Despite the growing importance of Part B drug spending, you can see here that increased spending for physician services is really what's driving expenditure growth. This chart shows the components of spending growth between 1999 and 2004. The bars represent the annual increase in per fee-for-service spending for physician and lab services and Part B drugs combined. The first bar represents an increase of 10.7 percent between 1999 and 2000. Growth in spending for physician services, which is shown in green in the middle there, accounted for 82 percent of the total increase.

Since 1999, the only point at which growth in physician expenditures did not account for the lion's share of spending growth for these SGR components was between 2001 and 2002. During that time period we had a negative update for physician services, combined with a jump in drug spending due in some part to reimbursement for the new drug Aranesp.

What accounts for growth in physician expenditures? Growth in service volume and intensity. We controlled for changes in the number of fee-for-service beneficiaries and found that volume and intensity increases accounted for more than 80 percent of the growth in physician spending between 1999 and 2002. A previous MedPAC analysis examining growth in the use of physician services over that same time period found a particularly high rate of increase in use of imaging services such as MRIs and CT scans, and use of tests such as cardiovascular stress tests also grew rapidly during this period.

MedPAC also has found, as have other researchers, the use of imaging services and diagnostic tests varies widely across geographic areas. So some portion of the change in service use over time probably represents overuse. This is of concern not only because of its effect on Medicare spending but also because, as Kevin pointed out, greater use of services often is not associated with improved outcomes. As you heard earlier, there's concern among private plans about the proliferation and overuse of imaging machines and other technologies and that's prompted some plans to pursue purchasing strategies aimed at reducing this growth in use.

So we'll have more for you on the mandated report in November and we're happy to take any questions or comments that you have in the meantime.

DR. MILSTEIN: The question as to whether or not this reflects overuse as defined in health services research or IOM parlance is a little bit problematic in that overuse is defined as services for which there is evidence that if the incremental service is provided it generates more patient risk than likely benefit. And our list of such rules for determining overuse is de minimis.

Most of the increased volume that we are describing here would not, I don't think, fall into evidence-based overuse. It would fall into the category of services for which we don't have any kind of outcomes information. Ergo, we don't really have much in the way of evidence-based clinical guidelines. So they are essentially non-value-added in terms of measurable impact on health state incremental services, but they don't really violate any so-called overuse guidelines, of which we don't have many in this country.

So I just want to make the point that there is a lot of evidence -- actually folks at Dartmouth keep telling us that in geographies where more and more of these services are being provided we're not getting much in the way of population health gain, patient-perceived functional status improvement, or patient satisfaction. But it wouldn't technically fall into the overuse area. We just don't have good rules.

Last comment is, one of the things I think you may want to comment on if you had a chance to review it is, there was an important article in Health Affairs in the spring that actually by geography mapped the relationship between Medicare areas with high service volume and the degree of compliance with evidence-based quality rules actually showing an inverse relationship. That is, suggesting a so-called crowd-out phenomenon in which these supply-sensitive services, which have not been shown to be associated with any patient health gain, actually appear to be crowding out evidence-based adherence to quality guidelines.

DR. SCANLON: I would agree with Arnie in terms that technically we can't demonstrate overuse, but I think putting this into the context of the Dartmouth, if you could talk about the fact that -- and this is a hypothesis -- that areas where there has been demonstrated higher use and where there's suspicion of overuse had similar growth rates as areas that have low use to begin with. It's not that we're having high use over this period of time, because the low use areas are catching up. It's much more pervasive in terms of growth everywhere, including the areas that we were suspicious about to begin with and we would even be more suspicious now that we see that they are continuing to grow.

MS. DePARLE: I was looking at the paper to see if I could find this. Sheila and I were both a little puzzled by the state chart that you showed. I just wanted to be sure I understand this. Is the change in enrollment in fee-for-service, do we think that's out-migration or do we think those people went to Medicare+Choice or Medicare Advantage plans in those states?

MS. KELLEY: It could be either.

MS. BURKE: So the New Yorkers could have moved to Florida?

MS. KELLEY: They could have, yes.

MS. DePARLE: While I was sitting here trying to figure that out, you made a point that I didn't follow but sounded important. You said, as a result of all this we think there was a 2 percent increase in fee-for-service? Could you just restate it, because I missed it?

MS. KELLEY: The effect on spending, it was very small, about two-tenths of a percent.

MS. DePARLE: Of the change in enrollment?

MS. KELLEY: No, of spending changes was due to these geographic shifts.

MS. DePARLE: So it wasn't a very big --

MS. KELLEY: No, not at all.

DR. REISCHAUER: These are the percentages of total Medicare enrollment, so for North Dakota to be anything but white would be very difficult. The whole Medicare population would have to move.

MS. BURKE: The question is, we're trying to figure out what the calculation is. Are the percentage shifts shown against the totality of Medicare fee-for-service enrollment or against the base? For example, if it's an indication of New York, is it against New York or is it against the nation?

DR. HAYES: It's against the nation.

MS. BURKE: So what does that mean about New York? DR. REISCHAUER: It doesn't tell you anything about New York, but it answers the question they asked.

DR. MILLER: I think what we're trying to do here is, first of all, there's a lot of geographic variation in the levels of expenditure around the country. This has no comment on that. You're looking at growth in volume per beneficiary and you're trying to say to yourself, what kinds of factors might be affecting that. So does the aging of the population affect it?

Here what you're asking is, if beneficiaries re-sorted themselves around the country and moved from a low utilization state like Minnesota to a high utilization state like Miami in Florida, did that have any effect on the expenditures per beneficiary, and hence might explain this growth in volume per beneficiary that we've seen over time?

What the map is saying is that -- we can quibble over the metric but what it's saying is that as certain states, say Florida, took more of the proportion of fee-for-service enrollment over, did that have an effect on volume? And the point they were trying to make is, because other states went down, the net effect from this reshuffling of beneficiaries around the states was very small, very small positive, two-tenths of a percent.

MS. DePARLE: But if more people had moved from a state with low practice patterns and volume and intensity trends to one with higher, it doesn't answer that question, does it, about what might have happened then?

DR. MILLER: I think it does.



MS. DePARLE: You think it says it wouldn't be big?

DR. MILLER: If everybody moves --

MS. DePARLE: That's hard to believe.

DR. REISCHAUER: There aren't many people in North Dakota, so with all due respect to those of you from there, so even if they all moved to Miami it wouldn't shift much Medicare spending in the aggregate. So that's what we're asking.

MS. DePARLE: In the aggregate. But that doesn't answer the question of what would have happened to those individual people, whether their spending in a different environment might have increased. One way or the other, you don't know. But in the aggregate, I understand what you're saying.

MS. BURKE: But we also don't really know from this whether it is a question of out-migration or shifts in delivery, payment systems. They could have all moved to managed care or they could have all moved to Miami.

MR. HACKBARTH: I think Wennberg and colleagues, their research would cause you to believe that if a Minnesota beneficiary moves to Miami, that the supply-sensitive portion of the care that they will start to receive care like everybody else in Miami. Now if they developed on the preference-sensitive part of the care Minnesota attitudes about what they like in health care, maybe that would move less.

MS. BURKE: But you don't know from this if they moved to Miami. They could have just moved to Blue Cross as compared to something else.

DR. WOLTER: I was just wondering if it would be of any utility to look at the specific effects of, for example, drugs and imaging on the SGR, and actually see that even though you're showing that 80 percent-plus of the overall effect comes out of physician services. Because it may be that the ultimate policy solutions are to tackle different issues here somewhat differently. In fact that does seem to be happening already.

So in other words, how much is the drug utilization part of the negative SGR predictions that we have? It's possible there would be some utility to that.

DR. HAYES: As you know there are a number of factors that are driving the SGR situation. Some of it has to do with growth in the economy. There's just a lot that goes into that calculation. It's possible to separate out the effect of just drugs, but it's a complex task.

DR. WOLTER: Similarly, I don't know if this is possible either, but if there is true geographic variation and there's a concentration of that -- Dave is always bringing up regional approaches, maybe for different reasons -- but would we tackle approaches to this differently by region if we had good evidence as to where this crowding out is occurring? I don't know if that would be a tactic or not. Then we also might look at winter versus summer because I'm sure Montana and North Dakota are populating many these areas in the winter.

DR. MILSTEIN: Has anyone examined the question of whether or not as the rate of service growth has increased in the

Medicare fee-for-service population it appears to be having detectable favorable effects on any measures of quality of care? In other words, holding geographic variation -- we know that the areas vary in what their basal levels of service per Medicare beneficiary adjusted for diagnosis, age and gender, we know what that starts.

So we have 50 runners. Each of those runners has increased their service per Medicare beneficiary over a period of time. Do we have any information about whether or not that increased growth of services is favorably affecting health, either overall or in the geographies that started out lean, or in the geographies that have grown more quickly or more slowly? In other words, what's the benefit to the Medicare program, the Medicare beneficiaries, if any, associated with these high rates of service growth?

DR. HAYES: I'm not aware of any work that has looked specifically at that. The only pieces of research that come to mind are the work that the Commission has done just looking cross-sectionally at the relationship between variation in spending and quality measures that were published by Steve Jenks and others from CMS a few years ago.

The other thing that comes to mind is the work, also from Steve Jenks, which looked at the changes in these measures over time and did see some improvement. But I'm not aware of anyone going the next step that you are talking about and trying to correlate the improvements with the changes in spending and geographically. It would be an interesting question, but I'm not aware of anything like that.

MR. HACKBARTH: Anyone else?

Okay, thank you.

Next we have, actually the next two items are both related to the issue of practice expense, both mandated reports. The first one is the overall report on practice expense that we took a first look at at our last meeting. Then from there we will turn to the specific issue of cardiothoracic surgeon practice expense.